

# Shoreview: Our Community, Our Water, Our Responsibility

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## Our Community

Shoreview is a community respected throughout the Twin Cities for providing a high quality of life, neighborly values, and citizens that are active and caring with a sense of responsible civic stewardship. Ranked among the best places to live in the region, Shoreview contains lakes and open spaces that provide a variety of recreational and leisure opportunities. Additionally Shoreview is known for maintaining one of the lowest crime rates in the region and the city is viewed as a leader in providing safe, quite neighborhoods and excellent employment opportunities.

## Our Water

Shoreview has a variety of wetlands ranging from lakes and waterways to storm ponds. These bodies of water provide the community with recreational and environmental services. The lakes, ponds, and wetlands of this area contribute to the overall aesthetic quality of the environment and community pride. These features are highly valued among Shoreview citizens and serve as attractions that draw people to the city and make it a desirable place to live. People are naturally drawn to areas containing bodies of water and use the water quality as a gauge for the surrounding environment as a whole.

## Our Responsibility

Shoreview is 96 percent developed, which creates a situation for potential conflict between human activities and the integrity of ecological systems in the community. This is due in part to storm water runoff from the numerous impervious surfaces present in the highly developed area, because as water passes over these areas it picks up pollutants that are on the surfaces and deposits them directly into water systems, often without any prior treatment or filtration. Similarly, harmful inputs from treated lawns in residential sections of the city also frequently flow directly into backyard water systems. The few remaining open spaces in Shoreview and the wetlands are providing valuable ecosystem services. These areas depend on the ability of City officials and citizens to effectively manage their health and function so they can continue to provide a socially and ecologically healthy and sustainable community.

## Impervious Surfaces

Impervious surfaces are constructed surfaces such as rooftops, sidewalks, roads, and parking lots which are covered by impenetrable materials. These materials such as asphalt, concrete, brick, or stone seal surfaces, repel water, and eliminate rainwater infiltration and natural groundwater recharge. Shoreview residents will benefit from, understanding the importance of their daily choices and actions that affect the quality of the water resources in their neighborhoods and throughout the city. Hiring a college intern to work with residents interested in water quality would be a first step toward solving this issue.

## Surface Water Runoff

Surface water runoff is when the amount of water falling on the ground exceeds the infiltration rate of the surface. Runoff is a contributing factor to environmental impacts such as erosion and flooding. To compliment and support the community-based wetland education programs, Shoreview could start a training program for city officials focusing on best management practices and collaboration among city staff and watershed organizations

## Storm ponds

Storm ponds are man made ponds that provide storm water flow control as well as improve water quality. These ponds maintain a pool of water in addition to detaining storm water by letting water runoff flow into these pools. The purpose of a storm pond is to keep storm water runoff and its pollutants from entering storm drains or other natural water bodies. There is considerable confusion among the Shoreview citizens about the use and management of the wetlands and storm ponds within the city. To resolve this issue we recommend developing a citizen storm water and wetland education program.

## Eutrophication

Eutrophication is the increase of chemical nutrients in an ecosystem. This increase of phosphorus or nitrogen can cause a severe reduction in water quality for fish and other animal populations. Eutrophication is often the result of nutrient pollutants or urban storm water runoff. It promotes the excessive plant growth of certain species over others disrupting the normal functions of the ecosystem creating a lack of oxygen in the water for fish to survive. Shoreview has access to five environmental ordinances for wetland and storm pond management. These five Environmental Standards are Shoreview's primary regulatory tool for wetland and storm pond activity. While maintaining the current strengths within these ordinances, weaknesses like role confusion, vague language, and inappropriate scope can be modified to create effective tools for wetland and storm pond management.

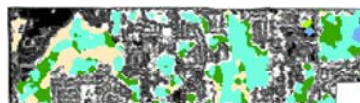


1986

Total Area	8,147 acres
Total Impervious Area	1,580 acres
Percent Impervious Area	19.33%

Impervious Intensity (%)	Acres	Percent	Intensity Weighted Impervious Area (%)
0-10	438	5.38	26
10-20	309	3.78	2.25
20-30	1,175	14.41	4.74
30-40	160	1.95	5.2
40-50	309	3.8	2.52
50-60	151	1.85	1.75

Key	Land Cover	Acres	Percent
	Agriculture	943	11.57
	Extraction	0	0
	Grassland	241	2.96
	Forest	776	9.52
	Wetland	817	10.03
	Water	933	11.45
	Urban	4,429	54.30



2002

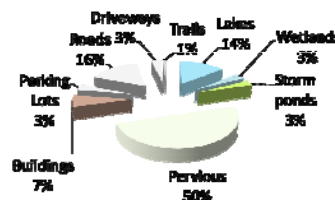
Total Area	8,147 acres
Total Impervious Area	3,751 acres
Percent Impervious Area	46.05%

Impervious Intensity (%)	Acres	Percent	Intensity Weighted Impervious Area (%)
0-10	3,328	40.73	0
10-20	1,200	14.73	2.86
20-30	1,550	19.03	5.6
30-40	1,030	12.63	3.58
40-50	120	1.47	3.23
50-60	219	2.69	3.11

Key	Land Cover	Acres	Percent
	Agriculture	203	2.49
	Extraction	0	0
	Grassland	3	0.04
	Forest	684	8.4
	Wetland	755	9.27
	Water	942	11.56
	Urban	5,573	68.41



2009



Land Cover	Percent
Buildings	7
Parking Lots	3
Roads	16
Driveways	3
Lakes	14
Wetlands	3
Storm ponds	3
Trails	1
Pervious	50

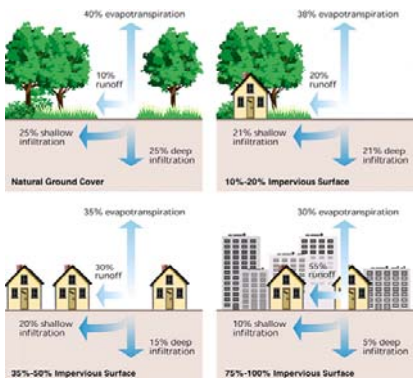


Figure: Federal Interagency Stream Restoration Working Group

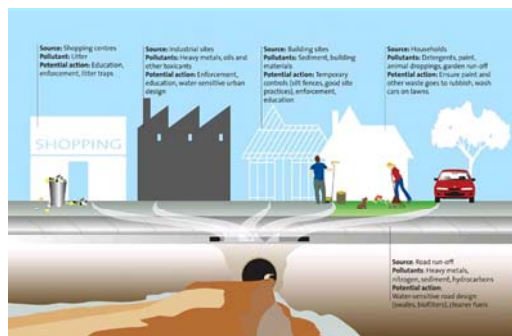


Figure: www.edmondok.com

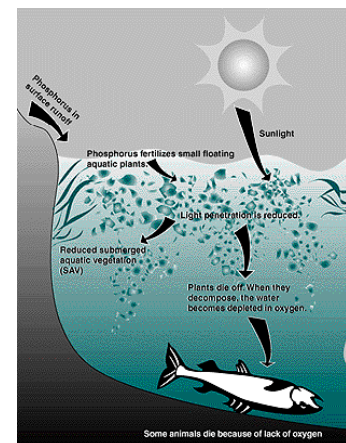


Figure: www.thirteen.org